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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,442	03/20/2001	Yoshinori Kitahara	HITA.0040	9536

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EXAMINER

LEWIS, MICHAEL A

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 01/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/811,442

Applicant(s)

KITAHARA ET AL.

Examiner

Lewis A Michael

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 04
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,4,5,6,7 & 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldberg et al. (U.S. Patent 6161082).

Regarding claim 1, Goldberg et al. disclose a method for providing a speech interpretation [translation] service, comprising:

- a. Providing an interpretation server having resident thereon a plurality of registered sentences to be interpreted. Goldberg et al. describes a Network that includes at least one translation [claimed interpretation] server and databases for storing and retrieving stored sentences (Col 4, Line 14).
- b. Communicating to a terminal communicatively connected to the interpretation server, at least one of the pluralities of registered sentences to be interpreted (Col 3, Line 20; Col 4, Line15).
- c. Receiving speech, in a first language, inputted to the mobile terminal [phone/computer with keypad/touch-pad/microphone that has wireless

transmission/reception capability], at the interpretation server (Col 6,49-54,Col 3, Lines 49 –56).

d. Recognizing the speech inputted based on a comparison of the inputted speech to the plurality of registered sentences to be interpreted (Col 4, Line 15).

e. Interpreting, by the interpretation server, the recognized speech into a second language, according to said recognizing (Col 3, Lines 49-55).

f. Outputting a translation signal correspondent to the second language to the terminal from the interpretation server. Goldberg et al. describe client computer terminals and a Network based [claimed interpretive] server interconnected with each other to display translated languages (Col 3, Lines 27-50).

Regarding claim 4, Goldberg et al. disclose that the communicative connection is a telephonic audio network connection (Col 6, Line 49).

Regarding claim 5, Goldberg et al. disclose the translation signal comprises an audio signal, wherein said outputting a translation signal correspondent to the second language to the mobile terminal comprises outputting the audio signal on the mobile terminal via the telephone network (Col 6, Line 66 - Col 7,Line 9).

Regarding claim 6, Goldberg et al. disclose further comprising: receiving an

approval instruction from the mobile terminal of the second language before said outputting a translation signal correspondent to the second language. Goldberg et al. describes an oral communication application where from a terminal [including claimed mobile device] , the user can be prompted on language preference for which the user can respond with a choice (Col 6, Lines 41-50; Col 5, Line 38).

Regarding claim 10, Goldberg et al. disclose a system comprising a further narrowing, based on a dictionary database, the ones of the plurality of registered sentences for said recognizing the speech inputted based on a comparison of the inputted speech to the plurality of registered sentences to be interpreted. Goldberg et al. describes narrowing the database search for stored model sentences with the use of two types of language translation programs that are combined together, a keyword and sentence model program. The combination of the program is a more efficient arrangement for retrieving translated sentences from the database (Col 4, Lines 23-45).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 2, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (U.S. Patent 6161082) in view of King (U.S. Patent 6532446).

Regarding claim 2, Goldberg et al. do not disclose details related to displaying a language classification menus on a mobile terminal.

However, King discloses a communicative connection that comprises of a mobile internet network, further comprising:

- a. Displaying an interpretable language classification menu on the mobile terminal prior to receiving speech in a first language (Col 5, Line 44).
- b. Receiving, from the mobile terminal, a selection input of the first language and the second language from the language classification menu (Col 5, Lines 35 - 41).

In a language interpretation application for mobile devices it is beneficial for users to have a scroll menu to make the decision making process easier.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention was made to modify Goldberg et al. to display a language classification menu on a mobile device as taught by King since it would have enhanced the decision making process for subscribers to the interpretation service.

Regarding claims 7 & 8, Goldberg et al. also disclose a method wherein:

- a. The approval instruction is an audio approval instruction given at the mobile terminal (Col 6, Lines 63; Col 4, Line 63 - Col 5, Line 4))
 - b. The outputting of a translation signal correspondent to the second language is in accordance with the approval instruction (Col 5, Line 10).
- Goldberg et al. describes that subscribers may be prompted for the desired language format. Once the intended recipient chooses the language format, the translated signal can be outputted. Goldberg et al. do

not disclose an audio instruction that is selected from a speaking set.

However, King et al. teach the use of a manual [keypad or touch-screen] or spoken input utilizing speech recognition to navigate a menu [claimed speaking set] displayed on a mobile device. The menu can be strings of phone numbers and sentences and other stored information (Col 11, Line 25). Hands-free menu navigation is a beneficial feature for users operating mobile devices.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Goldberg et al. to input manual or audio instructions to navigate the menus of a mobile device as taught by King since it would have empowered mobile users with the manual and hands-free operation features.

6. Claims 3, 12, 13, 14,16,18 &19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (U.S. Patent 6161082) in view of Sukeda et al.(U.S. Patent 5854997).

Regarding claim 3, Goldberg et al. do not disclose related details of the use of menus on a mobile terminal. However, Sukeda et al. disclose a plurality of scenes [menus and submenus] where each scene includes a plurality of model sentences, further comprising:

- a. Displaying on the mobile terminal a model sentence field (Col 5, Lines 4 –20)
- b. Receiving a model sentence field selection of a model sentence from the model sentence field (Col 7, Line 5).
- c. Interpreting comprises interpreting the inputted speech according to the model sentence field selection (Col 7, Line 9).

The general use of menus makes it easier to categorize and retrieve data from databases used on the interpretation server.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention was made to modify Goldberg et al. to include menus on a mobile device as taught by Sukeda et al. since it would have enhanced the decision making process for subscribers to the interpretation service.

Regarding claims 12,18 & 19, Goldberg et al. disclose a speech interpretation service consisting of speech interpretation server that is used by a mobile terminal, comprising:

- a. A speech input for receiving an inputted speech in a first language from a mobile terminal (Col 6, Lines 49-54, Col 3, Lines 49 –56).
- b. A memory having stored thereon a plurality of model sentences, wherein the prescribed symbol string is present among the plurality of model sentences Goldberg et al. describes a Network that includes at

least one translation [claimed interpretation] server and databases for storing and retrieving stored sentences (Col 4, Line 14).

c. A speech output that outputs the second language in audio or text to the mobile terminal (Col 3, Lines 49-55; Col 7 Line 6).

d. At least one connection between the mobile terminal and the communication server (Col 6, Lines 49-54).

e. One connection is at least one selected from the group consisting of a mobile internet connection and a telephone network connection (Col 6, Lines 49-54).

Goldberg et al. do not teach a receiving input and converting it to a prescribed string. However, Sukeda et al. teach a speech recognizer that receives the inputted speech and converts the inputted speech into a prescribed symbol string (Sukeda Col 5, Lines 16). Sukeda describes cards [menus] that each has a series of model sentences to which they are associated. The cards include sentences [claimed prescribed sentences] that are the keyword for retrieving sentences from a database. In addition, Sukeda et al. teach that the data structure of the data in the database is defined with an ID of a text to be displayed and translated, and audio data file of the text and a pointer for a card linked with the sentences (Col 6, Lines 11 – 25). The method of creating prescribed strings [identifiers or references] to data is standard in database

technology since it creates a pointer to data so that storing and retrieving data becomes a much more efficient process.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Goldberg et al. to use prescribed strings to access data as taught by Sukeda et al. since it makes interpreting or translating sentences a much more efficient process.

Regarding claim 13, Sukeda discloses the memory comprises: a command sentence table, including a plurality of command sentences, wherein said speech recognizer differentiates the plurality of model sentences from the plurality of command sentences, and wherein each of the plurality of command functions instructs an action by the speech interpretation server (Sukeda et al.(Col 2, Line 35 –41). Sukeda et al. describes a control program that stores model sentences, command sentences and translated sentences in various tables [cards] within a database that resides in the memory of a computer. In addition, the display shows several command functions that can be used to access the data (Fig 3, (202); Fig 4 – Fig 5). Storing data in computer memory and presenting a front-end with icons to retrieve data is basic to database operation.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Goldberg et al. to store data in memory and provide

command functions as taught by Sukeda et al. since it makes interpreting or translating sentences a much more efficient process (Sukeda et al.(Col 2, Line 35 –41).

Regarding claim 14, Sukeda et al. disclose a comparator, wherein a comparator compares the inputted speech to the plurality of model sentences in order to generate the prescribed symbol string (Col 6, Lines 11 – 25).

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify Goldberg et al. to compare the model sentences as taught by Sukeda et al. since it gives the user a choice (Sukeda et al. (Col 2, Line 29 – 34).

Regarding claim 15, the combination of Goldberg in view of Sukeda et al. disclose each of the plurality of model sentences is classified according to a scene of use [menus] (Sukeda et al., Fig 7).

Regarding claim 16, Goldberg et al. disclose that the speech output comprises a speech synthesizer output that outputs the second language to the mobile

terminal in audio (Fig 3, 303,203).

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (U.S. Patent 6161082) in view of King (U.S. Patent 6532446) and further in view of Sueda et al. (U.S. Patent 5854997).

Regarding claim 9, Goldberg et al. disclose a method wherein:

- a. The approval instruction is an audio approval instruction given at the mobile terminal (Col 6, Lines 63; Col 4, Line 63 - Col 5, Line 4))
- b. The outputting of a translation signal correspondent to the second language is in accordance with the approval instruction. Goldberg et al. describes that subscribers may be prompted for the desired language format. Once the intended recipient chooses the language format, the translated signal can be outputted (Col 5, Line 10).

King et al. teach the use of a manual [keypad or touch-screen] or spoken input utilizing speech recognition to navigate a menu [claimed speaking set] displayed on a mobile device. The menu can be strings of phone numbers and sentences and other stored information (Col 11, Line 25).

The modified Goldberg et al. do not teach the use of repeating of the outputting translation signal. However, Sukeda et al. disclose a method of repeating the outputting of a translation signal correspondent to the second language in accordance with the approval instruction upon each receipt of the approval instruction (Col 6, Lines 43-55). This procedure is might be necessary to repeatedly check on whether the source language phrase translation is present in the database.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to modify the modified Goldberg et al. to input manual or audio instructions to navigate the menus of a mobile device as taught by Sukeda et al. since it would have given users the ability to recheck the output translation.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (U.S. Patent 6161082) in view of Emery et al. (U.S. Patent 5727057).

Regarding claim 11, Goldberg et al. do not teach identifying mobile terminals and billing users. However, Emery et al. teach a method that further comprises of:

- a. Identifying the mobile terminal based on at least one identifying characteristic (Col 11, Line 5).
- b. Charging a predetermined fee to the identified mobile terminal for said interpreting or service provided (Col 13, Line 60).

It is in the interest of all service providers to be able to track usage by customers for billing and other purposes.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention was made to modify Goldberg et al. to track subscriber's usage of the service for billing purposes as taught by Emery et al. since it is the interest of the service provider to track and bill customers.

9. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (U.S. Patent 6161082) in view of Sukeda et al.(U.S. Patent 5854997) in further view of Emery et al. (U.S. Patent 5727057).

Regarding claim 17, the modified Goldberg et al. do not teach the use of identifying and billing subscribers. Emery et al. teach a speech interpretation server that further comprises of:

- a. An authorizer, wherein said authorizer identifies the mobile terminal based on at least one identifying characteristic (Col 10, Line 12).
- b. A billing database, wherein the mobile terminal correspondent to the at least one identifying characteristic is billed by said billing database for use of the speech interpretation [or navigation service provided] server for a predetermined time (Col 13, Line 60).

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It is in the interest of all service providers to be able to track usage by customers for billing and other purposes.

Therefore, it would have been obvious to one of ordinary skill at the time of the invention to further modify the modified Goldberg et al. to track subscribers usage of the service for billing purposes as taught by Emery et al. since it is the interest of the service provider to bill customers.

Conclusion

6. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,

Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Lewis, telephone number (703) 305-8730.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703) 305-4827. The facsimile phone number for this group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

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Doris To
11/12/04
DORIS H. TO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600

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